

## DROUGHT RELIEF GRANT APPLICATION

Ecology Use Only

Application Number				
D2015	1	2	-c	R0
Date				
Rec'd 7/30/2015 <i>PW</i>				

The information provided in this application will be used to determine general eligibility for funding from the Drought Relief Program, and the priority or ranking of the proposal amongst other competing proposals.

Separate application must be made for any needed emergency drought authorization. Before final approval of grant funding, the applicant must submit copies of all required permits and other authorizations needed for the proposal to Ecology for our review.

<b>1. Applicant Name(Public Body):</b> Kennewick Irrigation District			
Address: 12 West Kennewick Ave	City: Kennewick	State: WA	Zip: 99336
(a) Authority (State Law): 87.03			
(b) Date Organized: 1917			

<b>2. Contact Person:</b> Charles Freeman			Title: District Manager
Address: 12 West Kennewick Ave	City: Kennewick	State: WA	Zip: 99336
Email: cfreeman@kid.org		Phone #: 509.586.9111 ext 104	

<b>3. PROJECT(S) DESCRIPTION</b>	<p>Provide a description of the proposed project(s) and a detailed scope of work. Attach additional sheet(s) if necessary. Attach a map (U.S.G.S. Quad or comparable) showing the geographic location of the proposed project(s).</p> <p>The Kennewick Irrigation District is renting large water pumps and installing in strategic locations in our irrigation system that will allow KID to store water in off peak periods and withdraw stored water in peak demand periods. In addition, KID is renting pumps to place in system drains and wasteways that will capture return flows and return to our distribution system. KID is renting 4 large pumps at the following locations:</p> <ol style="list-style-type: none"> <li>1. Cherry Creek Reservoir on DIV IV of the Main Canal will be used to meet peak demands.</li> <li>2. South Edison street back fill.</li> <li>3. Division IV 27<sup>th</sup> &amp; 395 will back feed the Southridge area.</li> <li>4. Zirkle Fruit on DIV IV of the Main Canal will aid in meeting end of canal deliveries.</li> </ol>
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#### 4. DESCRIPTION OF NEED

Describe what would occur without the benefit of the proposed project(s), including: the nature of the actual hardship, both short-term and long-term impacts, the expected loss of normal water supply by percentage, and the estimated potential financial losses. Explain why these circumstances constitute a water supply emergency resulting from natural-caused drought conditions, rather than a pre-existing condition during a normal water year.

The KID's water right in a normal year is 102,674 acre feet, since our May 10,1905 water right is subject to proration, due to the drought, the prorationed level set by the United States Bureau of Reclamation has been established @ 46% resulting in KID facing severe water shortages. , KID will not be able to meet the demand of the crops served by these canals resulting in diminished yields this year and without a strong water supply, the soil moisture profile needs for tree fruit cannot be met placing orchards, hay fields and row crops at risk next year. Additionally, without additional supplies, the residential areas perennial trees and shrubs as well as lawns are at risk because there simply isn't enough supply to meet demand. This project allows KID to deliver additional project water to help counter the harmful effects of a low water supply to its 23,249 accounts.

#### 5. EXPECTED OUTCOME(S)

Describe how the projects would reduce or avoid harm or hardships and any measures planned to assure the capability and reliability of the proposed project(s) to provide an emergency water supply to the applicant.

This project will allow KID an additional supply of water by capturing and storing the water in low peak periods and using the stored water in high peak periods helping the district meet the needs of its customers. The project will benefit many and harm no one person or group. The pumps are large water moves powered by diesel engines and are environmentally safe and reliable. They are quiet so they can be used in densely populated areas and meet all air quality standards.

#### 6. WATER SHORTAGE RESPONSE ACTIONS ALREADY TAKEN

Describe the measures taken by the applicant to plan for or mitigate the effects of drought (e.g., conservation, irrigation efficiency measures, leakage, elimination of non-essential uses).

On May 31<sup>st</sup>, KID instituted its first ever mandatory watering schedule for parcels 3 acres and less. The restriction only allows water twice per week up to 30 minutes per zone/station. For those parcels above 3 acres, project water was restricted to 3.30 gallons per minute per acre. For one week in July, that number was further reduced to 3 gallons per minute per acre and residential customers watering duration was reduced to 20 minutes per zone/station due to extremely low river flows. Additionally, in preparation for the next drought, from 2005 to current over 15 miles of earthen canal have been lined with an impermeable liner; EPDM and HDPE. Also, 12 automatic control gates were installed and are controlled by SCADA with an HMI product called Wonderware. In addition, KID is working with the Badger Mountain Irrigation District and the Columbia Irrigation District on recapture and reuse return flows into our canal system. However, both projects are in the planning stages but we are hopeful we will be able to move forward with these important projects. Additionally, KID recently hired RH2 Engineering on a recapture and reuse project in Badger Canyon. All aforementioned projects have been submitted to the WADOE Drought Grant program.

## **7. WATER RIGHTS**

- (a) Describe whether you have or will be submitting an application for an emergency drought authorization and or have other pending water right applications

At this time, KID will not be submitting further applications for change/transfer of a water right.

- (b) List the applicant's legal water rights to divert or withdraw water for use on land within the applicant's legal boundaries, and attach copies.

KID's water right is described in the Acquavella CFO document, Court Claim No. 629, as well as the KID Water Right Settlement Agreement dated July 11, 2001, and the Amendment to the KID Water Right Settlement Agreement signed in 2011. Copies of each are attached.

## **8. INTERGOVERNMENTAL COORDINATION**

Provide a summary of how the applicant has and/or will consult with affected agencies and/or Indian Tribes prior to and during implementation of the proposed project(s). Include a list of the affected agencies and Indian Tribes and a summary of impacts/approvals if known. (Attach an additional sheet if necessary.)

There is no need to intergovernmental coordination because KID is using its diverted water and return flows. Permits aren't required, and pumps will be placed in existing irrigation easements.

**9. PROJECT(S) SCHEDULE/DURATION**

(a) When do you expect to have all the required permitting, approvals, and funding?

The are no permit or approvals required. The funding source has been the existing KID drought fund but that fund has had over \$500,000.00 withdrawn to date.

(b) Approximately how long will the proposed project(s) take to complete?

Project is up and running.

(c) Expected project(s) schedule, including start date, completion date, and significant intermediary steps:

Start date is past and project will be complete at the end of this water season; 10/15/15.

**10. PROJECT COMPONENTS**

Check appropriate box or boxes and complete estimated cost for proposed activities under this grant.

- (a)  Engineering design and report \$ \_\_\_\_\_
- (b)  Project(s) plans and specifications \$ \_\_\_\_\_
- (c)  Purchase of land, rights-of-way, easements \$ \_\_\_\_\_
- (d)  Construction \$ \_\_\_\_\_
- (e)  Construction engineering \$ \_\_\_\_\_
- (f)  Education and outreach \$ \_\_\_\_\_
- (g)  Other Pump Rentals (4 each) \$ 90,608.46

<b>11. FUND SOURCES</b>	<b>Estimated total project cost</b>		<b>Estimated eligible project cost</b>	
(a) Total estimated project(s) cost	100 %	\$ 90,608.46	100 %	\$ 90,608.46
(b) Total estimated eligible project(s) cost	%	\$	%	\$
(c) Ecology grant share	50 %	\$ 45,304.23	50 %	\$ 45,304.23
(d) Match fund source(s): (specify)	%	\$	%	\$
(e) KID Drought Fund	50 %	\$ 45,304.23	50 %	\$ 45,304.23
(f)	%	\$	%	\$
(g)	%	\$	%	\$

Applicant may be exempt under WAC 173-167-040(3) from the fund match requirement

**12. CERTIFICATION**

I certify to the best of my knowledge that the information in this application is true, complete, and correct and that I am legally authorized to sign and submit this information on behalf of the applicant.

Charles Freeman  
PRINT NAME

  
SIGNATURE

District Manager  
TITLE

7/22/15  
DATE

**13. Send original, including attached sheets, maps, copies of water rights, and other supporting documents, to:**

**Department of Ecology  
Water Resources Program  
PO Box 47600  
Olympia, WA 98504-7600  
ATTN: Rebecca Inman**

**Pump Rental**

Site	Monthly Rental	Delivery	Pick-up	Maintenance (**)	# of month (*)	sub-Total	Tax	Total
Cherry Creek	\$ 4,383.00	\$ 600.00	\$ 600.00	\$ 1,000.00	3	\$ 15,349.00	\$ 1,320.01	\$ 16,669.01
Zirkle	\$ 5,969.80	\$ 600.00	\$ 600.00	\$ 1,000.00	3	\$ 20,109.40	\$ 1,729.41	\$ 21,838.81
CID Canal at Edison	\$ 6,417.90	\$ 3,400.00	\$ 400.00	\$ 1,000.00	2	\$ 17,635.80	\$ 1,516.68	\$ 19,152.48
Amon to Southridge	\$ 10,362.00	\$ 2,100.00	\$ 600.00	\$ 1,000.00	2	\$ 24,424.00	\$ 2,100.46	\$ 26,524.46

\*192 hours/month

\*\*Estimated total routine maintenance costs (oil, oil filter, fuel filter, air filter, etc.) for every 250 hours of running time.

**Estimate Set-up Labor**

Site	Operator Labor Rate	# of Hours	# of Hours (OT)	Mileage & Per Diem	Subtotal	Tax	Total
Cherry Creek	\$ 110.00	12.38	1	\$ 868.75	\$ 2,395.00	\$ 205.97	\$ 2,600.97
Zirkle	\$ 110.00	12.38	1	\$ 868.75	\$ 2,395.00	\$ 205.97	\$ 2,600.97

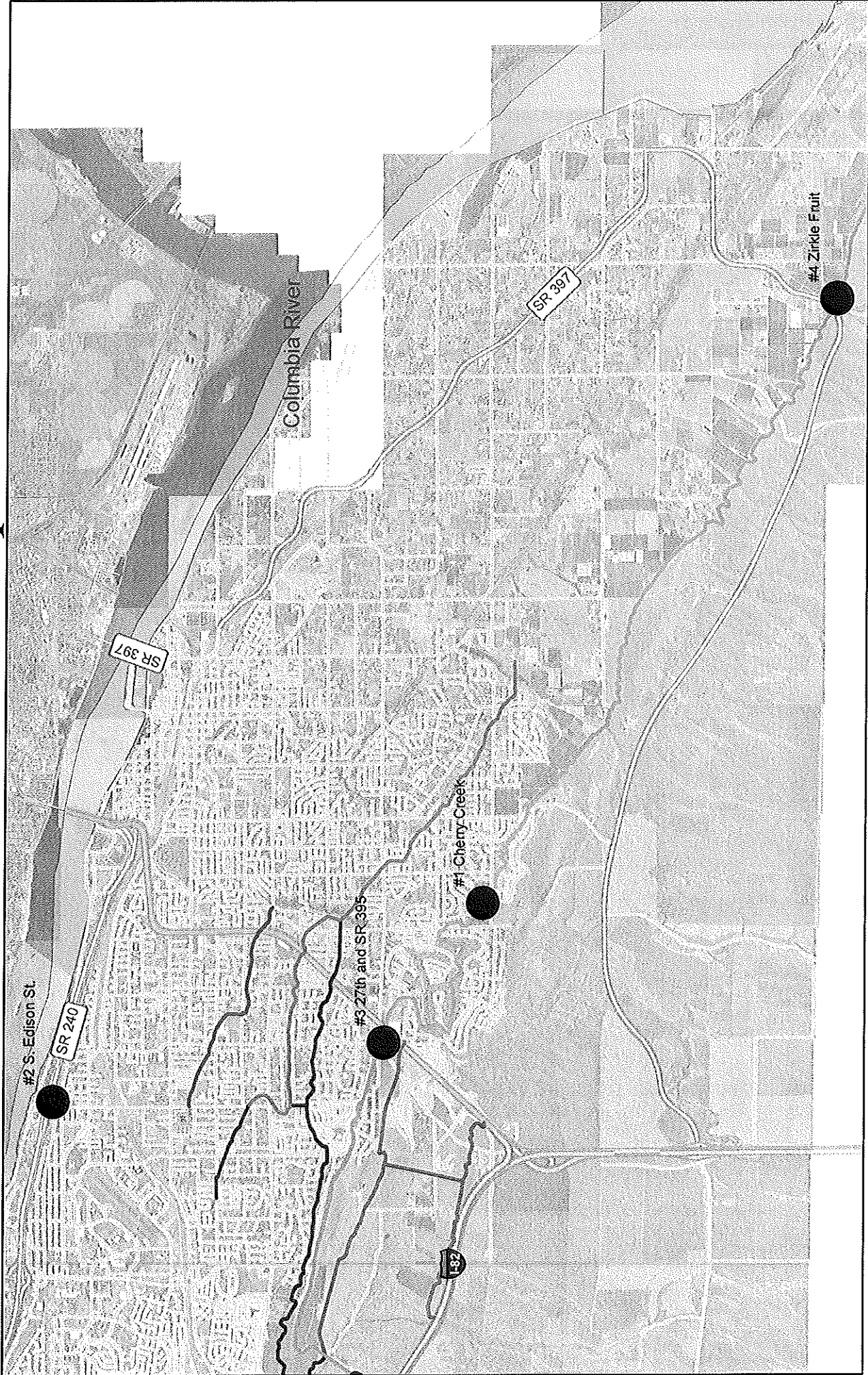
**Estimate Set-up Equipment**

Site	Fusion Machine	# of days	Subtotal	Tax	Total
Cherry Creek	\$ 375.00	1.5	\$ 562.50	\$ 48.38	\$ 610.88
Zirkle	\$ 375.00	1.5	\$ 562.50	\$ 48.38	\$ 610.88

**Estimated Total**

Site	Total
Cherry Creek	\$ 19,880.86
Zirkle	\$ 25,050.65
CID Canal at Edison	\$ 19,152.48
Amon to Southridge	\$ 26,524.46
	<b>\$ 90,608.46</b>

# KID Base Map



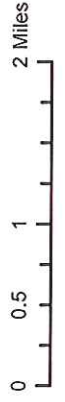
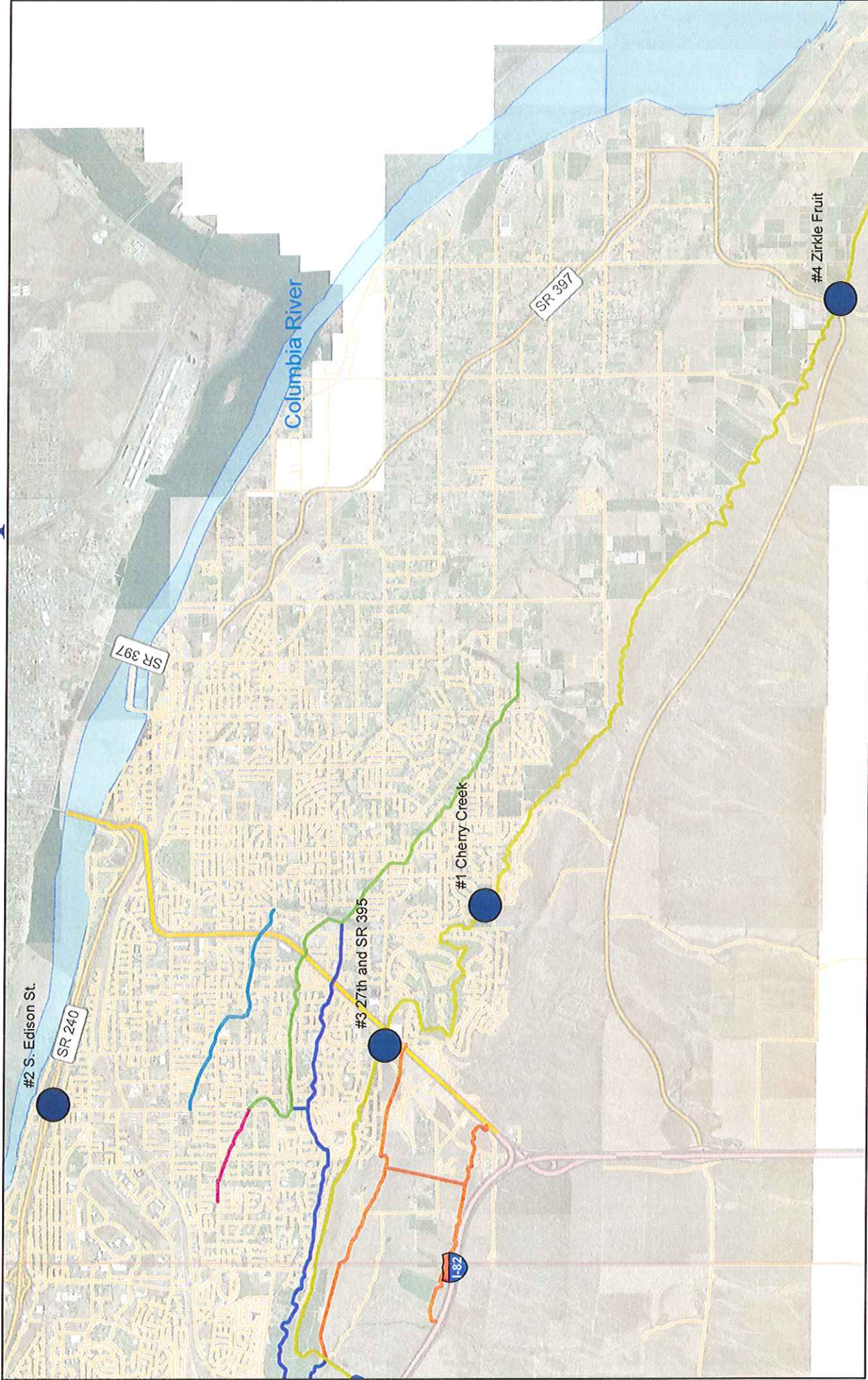
MAP BY: PRINT DATE:



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# KID Base Map



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